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Avoiding the hazards of wood burning

By Tom Watson

Special to The Seattle Times

Burning wood for heat used to be as simple as finding a log and lighting a match.

Today it requires more thought. As the hazards of wood-smoke pollution become increasingly evident, anyone who burns wood to get toasty this winter has a responsibility to use the most efficient, cleanest-burning methods available.

Q: Is it just my imagination, or are more people complaining about wood smoke now?

A: Many folks are, indeed, less tolerant of wood burning in their neighborhoods these days, especially when the smoke has a strong odor. Responding to citizen complaints and health risks, some government agencies have intensified their efforts to reduce air pollution from wood smoke.

Research backs up these increased concerns. Last December, the state Department of Ecology issued a particularly damning report. Fine-particle pollutants in the air, prevalent in wood smoke, annually cause an estimated 1,100 deaths in Washington and generate health-care costs of \$190 million, according to the study.

Q: Where does all this damaging wood smoke come from?

A: Older fireplaces and improperly dried wood are two main culprits. An open-hearth fireplace may look great, but it's a highly polluting, exceedingly inefficient way to heat your home. If you burn wood in an old fireplace for the ambience, consider using manufactured logs that burn up to 70 percent cleaner than most firewood.

When you do use firewood, make sure it has been dried, or seasoned, for at least six months. Wet wood creates more smoke and pollution because it doesn't burn as thoroughly. Find a wood supplier you trust, since burning improperly seasoned wood is actually illegal in our state.

Q: How does the burn-ban system protect us from wood smoke?

A: The Puget Sound Clean Air Agency (PSCAA) has state regulatory authority to call burn bans for King, Pierce, Snohomish and Kitsap counties, based on weather conditions and pollution levels.

During a Stage 2 ban, no burning is allowed in any woodstove, wood-burning fireplace, fireplace insert or pellet stove unless it's your only heat source. A Stage 1 ban is less inclusive, applying only to fireplaces, uncertified woodstoves and uncertified fireplace inserts. Burn-ban violators are subject to a \$1,000 fine.

Sign up for e-mail notices of burn bans at <u>pscleanair.org</u>/signup">pscleanair.org/signup or call PSCAA's burn-ban hotline at 800-595-4341.

Q: What if I have other wood-burning questions or problems?

A: The PSCAA (*pscleanair.org*) and U.S. Environmental Protection Agency (EPA) Burn Wise (*epa.gov/burnwise*) websites are both packed with resources. To submit a complaint about wood smoke or air quality, call the PSCAA at 800-552-3565, Ext. 6.

Q: Doesn't wood heat have positive aspects, if you burn it cleanly?

A: Definitely. Wood is a renewable "biomass" fuel, as opposed to fossil fuels such as oil or gas that contribute more significantly to global warming. Wood is often cheaper than other heating fuels, and, of course, sitting in front of a fire can be very enjoyable.

Q: Which woodstoves or other wood-burning methods are the cleanest?

A: Pellet stoves generally claim that honor. An efficiency rating of 75 percent, the gold standard for wood burning, is achieved by virtually all pellet stoves and a few other systems such as fireplace inserts. In comparison, an old fireplace may be only 10 percent efficient.

Q: Aren't pellet stoves and other ultraclean wood-burning systems expensive?

A: They can be, but a 30 percent federal tax credit on home energy-saving improvements includes the most efficient biomass stoves. This program is scheduled to expire Dec. 31, so act fast if you plan to purchase one. The EPA Burn Wise website provides information on that tax credit and other financial assistance.

Q: The fans and foes of wood burning seem so polarized now. Will they ever work out their differences?

A: We can only hope. As with everything else, a little respect and understanding goes a long way.

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